



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,616	08/10/2001	Eric W. Triplett	960296.97273	5346

7590 08/12/2004  
David M. Kettner  
Quarles & Brady LLP  
1 South Pinckney Street  
P O Box 2113  
Madison, WI 53701-2113

EXAMINER

HELMER, GEORGIA L

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/927,616

Applicant(s)

TRIPLETT ET AL

Examiner

Georgia L. Helmer

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 5/3/04 + 5/21/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13, 15-22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 15-22, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Status of the Claims***

1. The Office acknowledges receipt of Applicant's Response, dated 3 May 2004, and of supplemental Amendment, dated 21 May 2004.
2. In the 3 May 2004 Amendment, Applicant cancelled claims 5, 14, and 23, and amended claims 1, 4, 6, 7, 10, 11, 13, 15, 16, 19, 20, 22, 24 and 25. In the 21 May 2004 Amendment, Applicant amended claims 1, 4, 10, 13, 19 and 22. Claims 1-4, 6-13, 15-22, 24 and 25 are pending, and are examined in the instant action.
3. This action is made FINAL necessitated by Applicant's amendment..
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112 Enablement***

6. The rejection of claims 4, 13, and 22 under 35 U.S.C. 112, first paragraph, is withdrawn in light of Applicant's ATCC receipt provided 3 May 2004, as well as the statements regarding deposit conditions provided in the response of 3 May 2004.
7. Claims 1-4, 6, 13, 15-22, 24 and 25 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant asserts that taxonomically divergent species of plants have been found that are responsive to the crown gall controlling  $\alpha$ -proteobacteria besides *Agrobacterium*, citing recent laboratory experiments conducted by the inventors (3 May 2004 Response, p. 6-7). Applicant's assertion is unpersuasive. This information is being offered to overcome a rejection, and an attorney's statement is not probative. A Rule 1.132 Declaration from inventor(s) or other relevant person, is required.

Applicant further traverses saying primarily that by limiting the plants of the invention to plant species susceptible to crown gall disease, Applicants have inherently limited the plants to dicots because as recited in *In re Goodman*, *Agrobacterium*, an  $\alpha$ -proteobacteria only affects dicot plant cells (21 May 2004 Response, p. 6). Applicant's traversal is unpersuasive. The case law cited supports the Examiner's position. The court in *Goodman* upheld the enablement rejection as applied to claims which were not limited to dicot plant cells. The court required that the enabled plant host range be positively recited in the claims. This is precisely the Examiner's position.

### ***Claim Rejections - 35 USC § 102***

8. Claims 1, 7, 9, 10, 16, 18, 19 and 25 remain rejected under 35 U.S.C. 102(b) as being anticipated by Robleto, et. al. *Environmental Microbiology*, 1998, Vol 64, No. 7, page 2630-2633 (Applicant's IDS).

Applicant traverses saying primarily that Robleto et. al. and/or Briel do not suggest use of an  $\alpha$ -proteobacteria bearing plasmid pT2TFXK in a method of

controlling crown gall in plants, and that even though Robleto et. al. discloses that trifolitoxin production can limit nodulation of trifolitoxin sensitive Rhizobium on bean roots, the disclosure does not teach anyone that trifolitoxin could inhibit crown gall formation of stems of Nicotiana, grape or any other plant species (3 May 2004 Response, p. 8). Applicant's traversal is unpersuasive and not in accord with the scope of the claims. None of the claims other than claims 8 and 17, are drawn to grape, and none of the claims are drawn to a stem.

Applicant traverses saying primarily that the bacterial inoculation procedures for Rhizobium and Agrobacterium are different because the bacteria are different and the root and stem sites are different. Applicant's traversal is unpersuasive and not in accord with the scope of the claims. No claims are drawn to stem inoculation sites, and claims limited to Agrobacterium were not included in the rejection.

Furthermore, the prior art teaches a genetically engineered  $\alpha$ -proteobacteria comprising a pT2TFXK plasmid, and so anticipates product claims 19 and 25, since the ability of the identical strain as that claimed to act as a biocontrol agent would have been an inherent property. Additionally, the prior art teaches all the method steps and starting materials of process claims 1, 7, 9, 10, 16 and 18, wherein the desired result of crown gall control would be inherent following the trifolitoxin production taught by the prior art.

9. Claims 1, 6, 7, 9, 10, 15, 16, 18, 19, and 24-25 remain rejected under 35 U.S.C. 102(b) as being anticipated by Robleto as applied to claim 1, 7, 9, 10, 16, 18, 19 and 25 above, in light of Breil, et. al., J. Bacteriol. 1993, vol. 175, pages 3696-3702

(Applicant's IDS), and Breil et al, NCBI Accession No. L06719, locus RHMTFXA2G, 4 August 1993.

Applicant traverses saying primarily that Breil only discloses the nucleotide sequence of the trifolitoxin genes, and that with the exception of trifolitoxin, all must be regarded as putative because Breil does not provide any information regarding the function of the genes involved in trifolitoxin production (3 May 2004 Response, p.8). Applicant's traversal is unpersuasive. Breil teach not only the nucleotide sequence for the trifolitoxin genes, but also the amino acid sequence which corresponds to the TfxA peptide backbone of the polypeptide trifolitoxin toxin (Figure 1, legend). Clearly the Tfx operon is both necessary and sufficient to code for this peptide toxin.

### ***Remarks***

10. No claims are allowed. Claims 2-4, 8, 11-13, 17, and 20-22 are deemed free of the prior art, given the failure of the prior art to teach or reasonably suggest *Agrobacterium* or *Agrobacterium vitis* F2/5 as bacterial host for trifolitoxin production, or the plant hosts of claims 8 and 17.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1638

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 571-272-0976. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Georgia L. Helmer  
Patent Examiner  
Art Unit 1638  
August 6, 2004

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP 180-1638

